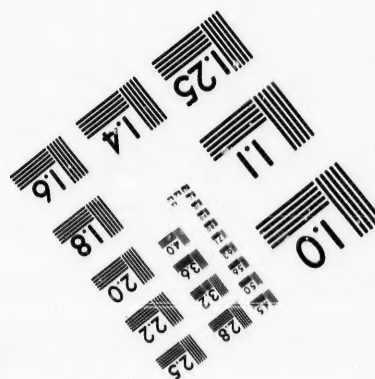
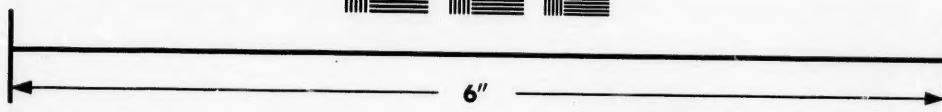
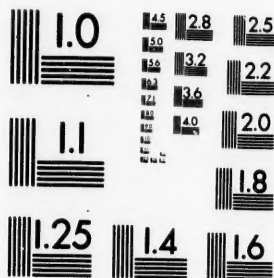


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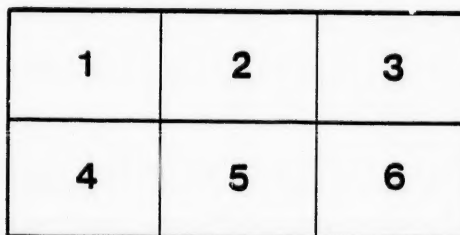
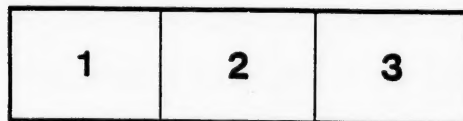
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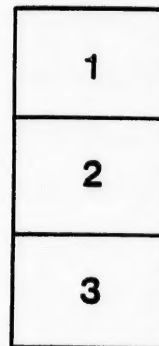
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9

**SIMMERS'**



**Vegetable and  
Flower Garden**

CONTAINING

**Practical Hints for the Amateur**



**P**UBLISHED BY.....

**J. A. SIMMERS**

Seed Merchants and Growers

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Chap.  
693

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**I**N the following pages we have endeavored to place in the reader's hands a few plain, simple, cultural directions, which, if properly carried out, and with a propitious season, will result in the planter receiving a due reward for his labor. Good vegetables can only be produced from high class seed, and with a view to assist the novice or undecided planter, we illustrate a few varieties of known merit and sterling worth.

While preparing this little book it seemed proper to add a few suggestions on the culture of flowers from seed. It is hoped that the hints there given and the lists of the several classes will so aid all lovers of flowers, but more especially the inexperienced, in making their selections, that they must be successful in their efforts.

TORONTO, 1896.

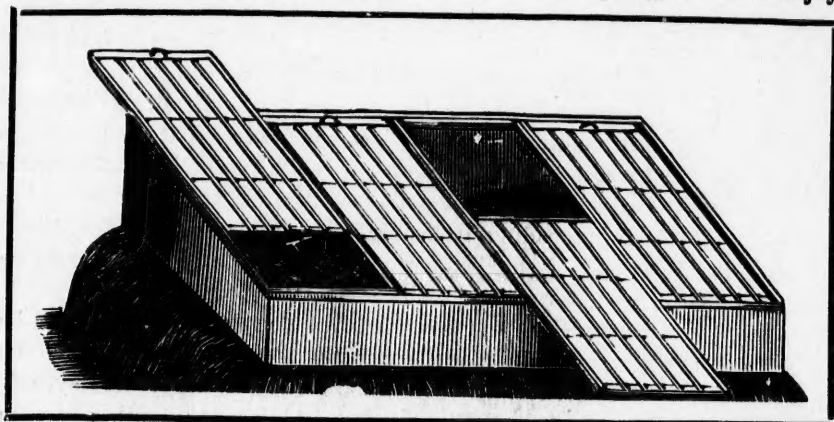
# Hints on the . . . .

## Preparation and

## Management of a

## Hot-Bed for Raising Plants.

**I**F all the requisites in a well managed garden, none is so much needed as a hot-bed. If it is desirous to raise a fair supply of early plants for the kitchen garden, such as Cabbages, Cauliflowers, Tomatoes, Peppers, Cucumbers, Melons, Herbs, etc., so as to have them ready for planting out earlier in the season, a hot-bed is indispensable. All the choicest varieties of flowers should, if possible, be sown in a hot-bed or under glass, early in the spring, so as to enjoy



the longer their flowering season. The professional gardener already knows the full value of the hot-bed ; he also knows perfectly well how to construct and manage it ; consequently he takes care early in the spring to erect as great a number of hot-beds as he possibly can. The following directions are, therefore, merely addressed to the amateur and inexperienced gardener, to whom we would desire to convey that the hot-bed is recommended in order to obviate the danger of our changeable spring climate, the unexpected spring frosts or drouths. It is easily managed, and may be got up at such slight expense that it will soon repay all who would secure an abundance of kitchen and flowering plants early in the season. Besides the many advantages already stated, the observ-

ing mind will find a good deal of interesting pastime in the operation connected with its management.

**Situation of the Bed.**—This should be in a warm position fully exposed to the sun, facing the east or south, and sheltered by a fence or hedge on the west and north. The soil should, if possible, be light and dry, as in this case the bed can be sunk a foot or more in the ground ; but if damp or cold it should be built upon the surface.

**Making the Bed.**—Manure fresh from the stable is best. This should be thrown over and thoroughly shaken up with the fork, making it into a conical heap. In this state it should be allowed to remain four or five days, at the end of which time it should be turned over, shaking it up as before. At the end of another three or four days it will be ready to make into the bed. Lay out the ground six inches larger than the frame, and put down a stake at each corner. The frame may be of any size, but the most convenient is nine feet by six, which will take three lights, three feet by six, the ordinary size, which can always be had ready-made. Proceed to build up the bed to the height of two feet and a half to three feet, making it rather firm, and watering if the manure is dry. When the bed is finished, put on the lights and let it stand to settle and exhaust the violent heat. In a day or two add three or four inches of light sandy loam, spreading it evenly over the bed. If the seeds are to be sown in the soil of the bed, two or three more inches should be added, but if in pots, no addition will be necessary.

The pots, when ready, and sown with the various seeds, should be put into the frame and shaded during the day, regulating the temperature by tilting the lights at the back, both night and day, and covering at night with mats. Plunge the pots into the soil, and with proper care the seeds will soon be above the earth. A thermometer placed in the bed will be the safest guide to the inexperienced. It should not rise over eighty-five degrees in the day, nor sink below sixty degrees at night. As the heat declines linings of fresh manure should be applied around the outside of the bed, but ordinarily for seeds this is not necessary.

The length or number of the frames is immaterial ; but they should be nine or twelve inches deep at the front, and fifteen to eighteen inches at the back. This will give a good slope to carry off the rain. Cold frames are simply the hot-bed frames set upon a warm spot of ground, covering at night to keep in the warmth accumulated during the day.

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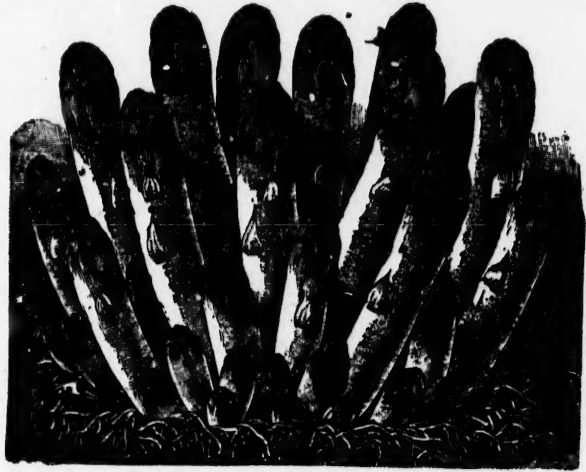
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## ASPARAGUS.

In early Spring sow the seed, after soaking it 24 hours in warm water, in drills about one foot apart and one inch deep. The soil should be very rich and well worked. Later, thin the plants to three or four inches apart in the rows, and cultivate often and thoroughly through the

Summer. Transplant the following Spring into permanent beds, deeply trenched and well mixed with decayed manure. Set the plants with roots well spread and crowns in the same direction, to avoid the roots running together, in trenches one foot deep, 15 inches apart, one foot apart in the trenches, covering



CONOVER'S COLOSSAL ASPARAGUS.

with four inches of soil. After the plants appear, gradually fill in the soil, giving constant cultivation. Spread on a top dressing of fine manure in the Fall and a coating of salt every Spring. One ounce of seed will produce about 500 plants and sow a row about 14 yards long.

## ASPARAGUS PLANTS.

The earliest and best crop is secured by the use of roots. They can be set out in Fall or Spring. The Fall setting gives the earlier start the next Spring. Cultivate as described above. The third year the bed will yield a full crop, and if kept in good condition will produce well for twenty years.

## ARTICHOKE.

Artichokes are propagated by suckers, or off-shoots, and by seed. When seed is used, sow early in the Spring in drills 1 inch deep and 1

foot apart. Transplant the following Spring into permanent hills 3 feet apart each way, three plants in a hill. They require rich soil, plenty of moisture and protection with leaves or earth during the Winter. The plant is ready for use just before the flowers expand. The underside of the head is the edible part, the leaves being separated after cooking. Three ounces of seed are needed to 100 yards of row.

The Jerusalem Artichoke is raised from tubers, and may be planted in same manner as Potatoes. They are very hardy and will stand our coldest weather. Enormously productive, they are suitable for table use, and are largely used for feeding stock. For information as to the method of planting and quantity required, see Potatoes.



GIANT WAX, OR BUTTER BUSH BEAN.

### BEANS- DWARF, BUSH or SNAP.

Plant as soon as danger from the frost is past, in light, warm soil, in drills about two inches deep and two feet apart, three inches apart in the drill, or in hills three to four feet apart. Avoid cultivating when wet with rain or dew, as this will injure the crop; but hoe often when dry. Plant every two weeks for a succession. One quart will plant about 200 hills, or a drill of 100 feet.

### BEANS, POLE.

Being tender, they ought to be planted when the ground is dry and warm. A well-manured, sandy loam suits them the best. Plant in hills four feet apart, six or eight beans to the hill eyes downward; afterwards thin to three plants in a hill. Set poles eight or ten feet long, before planting seed. One quart of seed plants 100 to 200 feet of row, according to size of beans.

### BEET.

Select a rich, mellow soil, sow in Spring as early as the ground can be worked, in drills one foot apart and one inch deep; thin to eight inches apart. For winter use sow in June. Cultivate often. One ounce of seed will sow 100 feet; six to eight pounds are required to seed an acre.



### MANGEL.

EDMAND'S BLOOD TURNIP BEET.

Sow in April and May in thoroughly ploughed, well manured soil, in drills two inches deep and about 18 inches apart. Thin out to 12 inches, and keep the weeds down by frequent hoeing and cultivating. Four to six pounds are required per acre.

### SUGAR BEETS.

Sugar Beets are not as heavy yielders as the foregoing, but are of superior quality, containing a larger amount of sacharrine matter. Thousands of acres are planted with Sugar Beets in Europe for the manufacture of sugar. They are excellent for feeding cows, improving wonderfully the quantity and the quality of the milk. Cultivation same as Mangel

### BROCCOLI.

This plant resembles Cauliflower, but is hardier and of less delicate flavor. Sow early in May and transplant late in June or early in July to a rich mellow bed. Cultivate as late cabbage. One ounce will produce 2,000 plants.

### BRUSSELS SPROUTS.

Although not in general use in this country, this is a most delicious vegetable. The seeds should be sown in March or April in the hot bed, or in the open ground when the weather permits. When the plants are three inches high they should be transplanted and cultivated the same as cabbages or cauliflowers. The early ones will be ready for the table in September ; the later ones, for winter use, should be harvested before cold weather, and stored the same as cabbages or cauliflowers. The small heads which grow along the stem are the eatable parts of this vegetable, and when boiled like a cabbage, or stewed with cream like cauliflower, are very tender and delicious. The leaves should be broken down in the Fall to give the little cabbages room to grow.



SIMMERS' MATCHLESS FLAT DUTCH CABBAGE.

## CABBAGE.

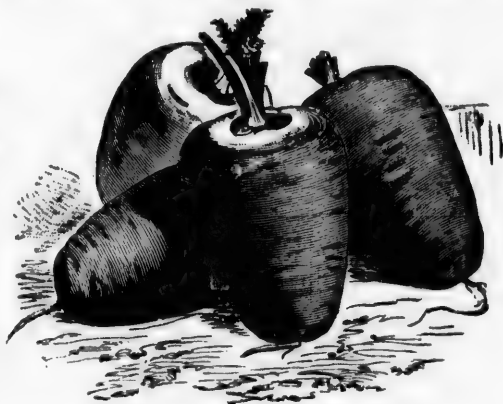
The requirements for a good crop are rich soil, deep plowing, high manuring, GOOD SEED and thorough after culture. Sometimes a fall planting of seed and a removal of the young plants to cold frames for the winter is frequently resorted to to secure a very early crop, but it is usual to sow the seed in February or March in hot-beds, and transplant in late April or early May to open ground, or to sow early in the open ground. Set the plants in rows two feet apart, and 12 to 18 inches apart in the row. A dusting of plaster or air-slacked lime, or a handful of ashes thrown upon the plants as they appear above ground will help prevent the attack of cabbage fly. For second early, sow in April and transplant in May. For late crops sow in May and transplant in July, setting the plants in rows three feet apart, and two feet apart in the rows. One ounce of seed will produce about 2,000 plants and sow an area of 40 square feet. The purchase of cheap cabbage seed is the poorest investment in the world; the failure can never be known until an entire season's labor and outlay is lost.

## CARDOON.

The Cardoon resembles the Artichoke, though it is larger in size, while its flowers are smaller. It is cultivated for its blanched leaf stalks and the midrib of its leaves, which are used in salads and soups. Sow early in Spring, one and one-half inches deep, in rows two feet apart, and thin to about 12 inches in the row. Earth up, like celery, when of proper height.

## CARROTS.

A light sandy loam, well tilled and manured the previous year best suits the Carrot. For early crop sow as early as the ground can be worked, in drills ten inches apart, and thin to five inches in the rows. The French Horn, owing to its extreme earliness, is used for hot-bed culture.



GUERANDE OR OXHEART CARROT.



Late sorts, the long and half-long varieties (main crop), sow from middle of May until first of July in drills 12 to 14 inches apart. Thin out to 6 and 7 inches in the row. Keep the hoe at work. One ounce of seed sows 150 feet of row.

### CAULIFLOWER.

Cauliflower ought to receive a similar treatment to Cabbage, except that it requires an extra rich soil, an occasional application of liquid



SIMMERS GILT-EDGE CAULIFLOWER.

manure and frequent watering especially when heading. Early sorts in this latitude are mostly sown in February or March in hot-beds, transplanted once before setting in open ground, and finally transplanted before the middle of April in rich deeply-worked soil, two feet by 15 inches apart. Late sorts are sown and

cultivated like late cabbage. When heading tie the top leaves together to protect from exposure to the sun. A half ounce of seed sows 100 yards of row and gives about 2,000 plants.

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No seed is more important than this, as every gardener knows. It is one of the seeds which in buying PRICE should never be questioned.

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### CELERIAC, or TURNIP-ROOTED CELERY.

Sow early in Spring. Transplant in May into rich, mellow soil in rows 18 inches apart and 6 inches in the row. Water in dry weather. Little or no earthing is required. The turnip-shaped roots, for which the is grown, are ready in October, and are used in soups and as a salad. One ounce will sow 50 feet of row.

## CELERY.

Sow the seed late in March or early in April on fine well-worked soil. Cover lightly, or, better still, roll or press it in. Shade the young plants for a week or ten days, and do not let the soil dry out. Cut them once or twice before setting out, to make them stocky. When from four to six inches high transplant into broad shallow trenches, or to level ground, setting dwarf sorts into rows three feet apart, and tall sorts four feet apart, six inches apart in the rows. Set out every two or three weeks for a succession. The soil chosen should be light, highly manured, partially shaded and moist or near water, as the plants must be freely watered in dry weather. Earthing up checks growth, and should not begin until the plants are quite well grown; then earth up gradually, keeping the leaf stalks close together so that the soil may not fall into the centre of the plant, but never earth up in wet weather, nor when dew is on the plants. The plants intended for winter and spring use need not be bleached until laid up. For winter storage dig in well drained soil a trench one foot wide and as deep as the height of the celery. To this remove the stalks with roots attached. Set them upright, closely packed, but not crowded.

Cover with boards to protect from rain, and later with straw or leaves to protect from severe cold. One ounce of seed produces 3,000 plants. A clever method of tile blanching has been devised which is a saving of time, labor and space, with only the first cost of the tile as an offset. At the time of earthing up cover each plant in alternate rows with a section



PARIS GOLDEN YELLOW CELERY.

of three-inch tile, drawing up enough earth to firm it. The stalks will come out clear white, crisp and tender, without dirt or rust. These rows can be two feet apart, and then afford enough earth to bank up the alternate rows, or it can be stored for winter use.

### CHERVIL.

Sow in a deep, mellow, rich seed-bed, in drills nine to twelve inches apart and cover two inches deep with fine soil. Cultivate like parsley. The leaves are used for soups and salads. One ounce of seed will sow 100 feet of drill.

### CHICORY.

Its dried roots are used as a substitute for, or as an ingredient of coffee. Sow in good rich soil half an inch deep and cultivate like carrots. In fall cut the roots in pieces about an inch in length, string and dry like apples. The dried roots are roasted and ground like coffee, or the roots may be blanched for a salad. One ounce sows 100 feet of drill.

### SWEET CORN.

The soil best suited for Corn for an early crop is a well enriched sandy loam. The planting should never be done until the weather is settled and warm, as heat is indispensable to the healthy growth of corn. The first planting should be made about middle of May, and successive plantings continued every two weeks, until first week in July, which date is the latest which corn can be planted to ensure a crop of green ears. Plant in hills three or four feet apart according to size of variety or strength of soil, or in drills three feet apart, and eight inches apart in the drill. Cultivate often and thoroughly. One quart of seed plants 100 yards of row.

### CORN SALAD.

Sow in Spring in drills one foot apart. Keep clean from weeds. It will mature in six or eight weeks. For early Spring use, sow in September, thickly in drills one-quarter inch deep. Tread the ground if dry weather. Protect with litter when cold weather comes and winter over like spinach. One ounce will sow thirty-five feet of row.



### CRESS or PEPPER GRASS.

Sow thickly in early Spring in drills one foot apart, and follow every two weeks with a new sowing as it quickly runs to seed. Water Cress should be sown along the margin of ditches, ponds, or, better still, of slow running streams. It requires no care except to free it at first from weeds. One ounce sows 100 feet of drill.

### CUCUMBER.

For early use sow in hot-houses on small sods overturned, or in small pots plunged in earth. As soon as danger from frost is over, transplant, with sod, so as not to disturb the plants, into hills in the open ground. For general crop sow from about the first to the middle of May in rich, mellow, warm soil. Put a shovel-



ful of well-rotted manure in each hill and cover it to two inches deep with fine earth. On this sow the seed, about eight or ten seeds to a hill; cover one half-inch with earth and press down. A liberal quantity of seed should be sown in each hill, say twenty to forty seeds, that there may be enough plants to survive the depredations of the striped cucumber bug or the borers. The young plants should be dusted every few mornings with ashes, plaster, or slug shot, to destroy these pests, and as soon as the plants are sufficiently large to take care of themselves, they should be thinned out to three or four plants in a hill. If the picking is carefully attended to, and all the fruit picked off as soon as large enough, the vines will continue to grow and bear all summer, especially if they are in a rather shady situation. If the fruit is allowed to ripen, the vines will dry up and die. For pickles plant from June to middle of July. One ounce of the seed is sufficient to plant about fifty hills.

### EGG PLANT.

Sow the seed in a hot-bed in March or April. When about three inches high pot the plants and plunge in earth ; transplant to open



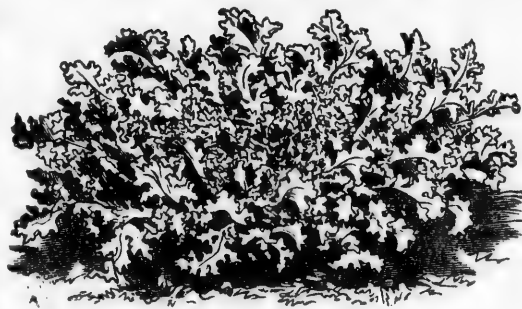
LONG PURPLE EGG PLANT.

ground in May or June, according to the warmth of the season. Uniform heat is essential to this plant, and it rarely recovers from the least chill in its early growth. Set out, according to richness of soil, two or three feet apart each way. One ounce of seed makes 2,000 plants.

grown blanch the inner leaves by gathering and tying up the outer ones at the top ; but tie up only when the leaves are dry and blanch in succession, as it keeps only a short time after blanching. For winter use take up with earth and plant closely in frames or a dry cellar. One ounce of seed sows 150 feet of drill.

### ENDIVE.

For early use sow about the middle of April, but for the main crop in June or July in shallow drills. When two or three inches high transplant or thin out to one foot each way. When full



CURLED ENDIVE.

### GARLIC.

Garlic sets should be planted early in Spring in a light, rich soil in rows one foot apart, and from three to five inches apart in the rows.



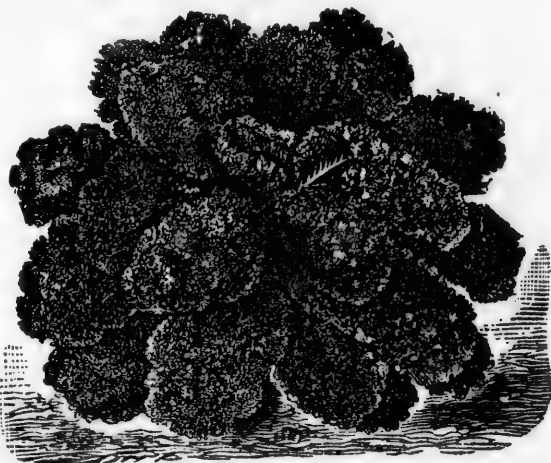
Cultivate like onions. In August the tops will die off and the crop is ready to gather. Garlic is used for flavoring soups, stews, sausage, etc.

### HORSE RADISH.

This pungent root is a great favorite as a relish in the early Spring and is a very pleasant appetizer, at a season when we have been without fresh vegetables for several months. It is raised from pieces of root three or four inches in length, from a quarter to a half-inch in diameter ; these slips are made from the tails or rootlets cut off in trimming the root for grating. Keep the slips in moist earth in a cool cellar until Spring. The roots may then be planted in a trench six inches apart.

### KALE or BORECOLE.

The Kales are excellent as greens for Winter and Spring use. The crown or centre of the head cut off so as to include the leaves is the eatable part. They are more hardy than cabbage, and are improved by frost, but the time and manner of sowing, and the culture are identical with cabbage. One ounce produces 2,000 plants or 100 yards of row.



DWARF GREEN CURLED KALE.

### KOHLRABI.

This vegetable, seemingly an intermediate between cabbage and turnip, has value both as a table delicacy and feeding stock. The edible part is the enlarged stem just above the surface of the ground, which is in prime condition when only half-grown. The full-grown bulb is tough and stringy. For early use sow in hot-bed, transplant and cultivate like early cabbage. For Winter use sow the middle of June 18 inches apart, transplanting, or, as this is difficult, thinning out to eight inches in the row. One ounce of seed affords 2,000 plants.



LARGE MUSSELBURGH LEEK

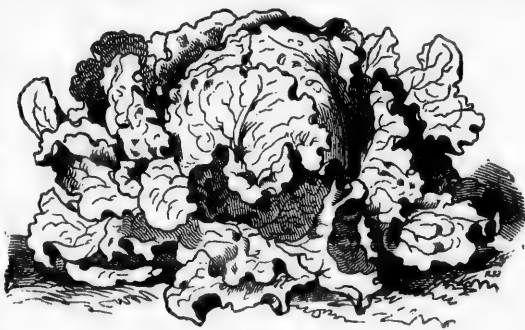
the salads, is easy of culture, being free from all diseases and insects. It requires rich, moist soil, clean cultivation and plenty of water. This will give the quick growth on which depends its appearance, tenderness and flavor. Sow in a hot-bed in early spring, and as soon as the ground can be well worked transplant in good, rich ground to rows eighteen inches apart, and eight to ten inches in the rows. For a later supply plant every two weeks

## LEEK.

This hardy vegetable is allied to the onion, but has a more delicate flavor. It attains suitable size for use the first year but never seeds until the second year. The whole plant has use, and the larger its size the better, therefore no bed for leeks can be made too rich. Plant the seed in April, in drills one foot apart and one inch deep. When six to eight inches high, remove the plants to deep, rich soil, setting them in rows 12 to 15 inches apart in the rows. Place as deep as possible, and during growth draw the earth to them to blanch the stems. One ounce will produce about 2,000 plants.

## LETTUCE.

Lettuce, the most used of all



HANSON CABBAGE LETTUCE,

from the middle of April until July, choosing varieties according to their heat resistance, and their tendency to remain in condition without seeding. If sown to be cut young, sow thickly in drills or broadcast ; but if fine, strong heads are desired, sow in drills one-fourth inch deep, 15 inches apart and thin, rather than transplant, to 12 inches apart in the rows. One ounce of seed produces 3,000 plants.



PARIS COS LETTUCE.

### MUSK MELON.

These universal favorites are too often neglected, owing to the idea that

they must have sandy soil, and require special skill to grow them. If a variety suited to your soil is planted and given fair attention melons may be had in abundance. If the garden has a southern slope that will be the best place for melons, but they will do almost as well on the level. Plant the seed when the ground is dry and warm. Plant from six to twelve seeds in hills six feet apart each



MONTREAL MUSK MELON.

way, and when danger from bugs is past thin to three vigorous plants in a hill. If manure is mixed in the hills at time of planting see to it that it is old and well-rotted. When the shoots are a foot long



SIMMERS' DOMINION MUSK MELON.

pinch off the tips to make them branching and to strengthen the vine. Thin out the fruit if it is excessive. The remaining melons will thereby increase in size and ripen earlier. Do not plant near pumpkins and squashes, as they hybridize. One ounce of seed plants 75 hills.

### WATER MELON.

These are also supposed to require special conditions, but they can



WATER MELON.

be raised under the same circumstances as Musk Melons. What they most need is a liberal feeding of well-rotted manure. If this latter can be obtained a good sized hole should be dug and filled in even to half a barrel to a hill. If this kind of hill be made, the larger varieties may be grown with success. Unless conditions are favorable, however,

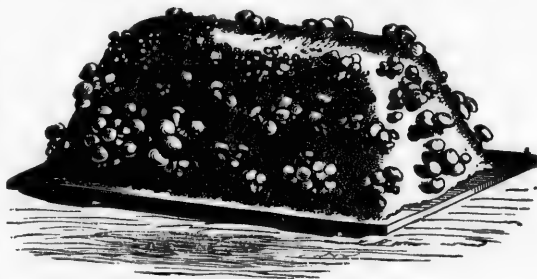
the smaller varieties are recommended, they being equally fine in quality. Plant in hills eight to ten feet apart each way, and cultivate like the Musk Melon. To secure the largest fruit have but one or two melons to a vine. One ounce of seed will plant about 60 hills.

### CITRON.

Grown for preserving purposes only, and being a species of Water Melon, requires the same cultivation.

### MARTYNIA.

This is cultivated for its seed pods, which when half grown are tender and much esteemed for pickling. Sow the seed in May or June in

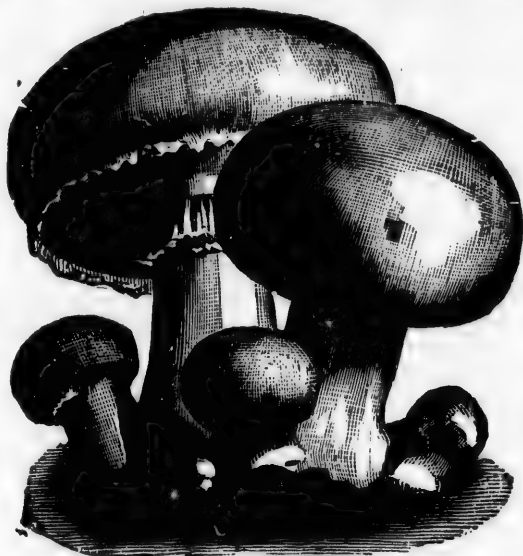


BED OF MUSHROOMS.

open ground three feet apart each way. Thin to one plant in a hill. One ounce plants about 200 hills.

### MUSHROOM SPAWN.

In preparation for a Mushroom bed procure fresh horse manure free from litter or straw, and old pasture soil. Mix thoroughly in proportion of three parts horse manure to one part loam. Turn daily until the extreme heat is out of it. Then, in some sheltered place, if possible, make out of this compost a bed four feet wide, eight inches deep and as long as desired, pressed solidly. Leave this until the heat subsides to 90 degrees, then plant pieces of spawn the size of a walnut in holes two or three inches deep, six inches apart each way; cover with the compost, and in the course of a week or ten days the spawn will be diffused through the whole bed. Now cover with two inches of fresh soil, and over this spread three or four inches of hay, straw or litter. If the surface becomes dry, wet with lukewarm water. Keep an even temperature of 50° to 60°. One brick will plant two by six feet.



EDIBLE MUSHROOMS.

For more detailed instructions how to grow Mushrooms, we recommend "Simmers' Mushroom Culture," a twenty-four page pamphlet; price, by mail, 10 cents.

**ROBINSON'S MUSHROOM CULTURE.**—A book bound in cloth, giving directions in how to prepare a mushroom bed and raise mushrooms. Price, by mail, 50 cents.

**MUSHROOMS, How to Grow Them.**—By Wm. Falconer. The most complete book ever published on the cultivation of mushrooms. The writer is a practical man who has devoted many years to experiments with mushrooms. Per copy, \$1.50, post paid.



### MUSTARD.

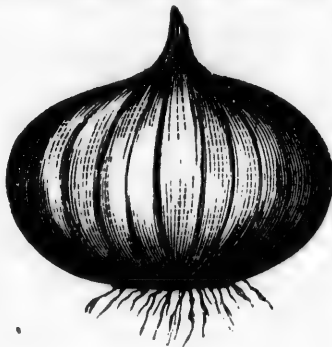
A desirable spring salad. Can be sown as soon as the ground is free from frost, and successive sowings should be made every two or three weeks. It grows rapidly and must be cut when young. Sow in shallow drills one foot apart, and when three inches high thin out five or six inches apart. One ounce of seed sows about 75 feet of drill.

### NASTURTIUM.

A very ornamental climber, much cultivated for the green seed pods which make very delicate pickles. The leaves are also used for salad. Plant in May, in drills one inch deep, and give them support to climb upon. One ounce of seed sows about twenty feet of drill.

### OKRA or GUMBO.

Sow in May, in hills or drills three feet apart. If in hills thin out to three plants: if in drills, to ten inches apart in the drills. Seed thickly and cover one inch deep. The young, green seed-pods are used in soups or like asparagus. The seeds are sometimes used as a substitute for coffee. One ounce of seed sows twenty-five feet of row.



ONION.



ONION.

### ONIONS.

**The Old Way**—Any land that will raise a good crop of corn, except stiff clay or gravelly soil, is suitable for onions. We prefer a sandy loam, with a light mixture of clay, as it is much easier to work, and produces good crops. Land that has been worked for two years previously in hoed crops, and heavily ma-

nured for these crops, and kept carefully free from weeds, would be in a most desirable condition to begin with. In black muck marsh lands, large crops of fine onions are grown, but the land **MUST BE WELL DRAINED**. The onions from the first crop on this class of soil are apt to be soft and rather inclined to run to "Scallions" or "Stiff-necks." However, we have seen very fine, well-shaped bulbs grown the first season. Use well-rotted manure freely—fifty loads to the acre will not be too much. Spread the manure evenly on the land, and plow it under late in the fall, or very early in the spring. As early in the spring as the ground can be worked without injury, give it a thorough harrowing and raking. A quantity of fine ground bone or good fertilizer worked into the soil at this time is very beneficial to the crop. Also another dressing of fertilizer just before they form bottoms, and if a quantity of wood ashes is added it will do no harm. In order to save time and labor, use great pains in marking off the rows to have them perfectly straight and of uniform width, less than a foot apart.

Sow the seed just as soon as the ground can be worked in good shape, using a Model Seed Drill if possible to be had; and it is almost useless to undertake even a small patch without a drill and hand cultivator, the work being so much easier, and good machines can now be had very cheap. Sow seeds at the rate of four or five pounds to the acre. Before you begin to sow, try the drill on a board or floor, until you get the drop just right. Seed should be covered from one-half inch to one inch deep, depending somewhat on the condition of the soil and weather at the time of sowing. Onions should be thinned out when about the size of a rye straw, disturbing the remaining ones as little as possible. As they grow on top of the ground they may be left quite thick, even if they do crowd each other. Bear in mind that you must keep the weeds down from the start, and that it is impossible to grow good onions on poor land and in a careless manner.

As soon as the onions are up so they can be seen the length of the row, give them the first hoeing, just skimming the ground between the rows. **NEVER HOE DEEP** and **ALWAYS HOE THE SOIL FROM THE ROW**, never to it. In a few days give them a second hoeing, this time up close to the plants, after which weeding must be commenced. This must be carefully and thoroughly done; remove every weed that can be seen in the row. In about ten days they will require another hoeing and weeding similar to the last, and two weeks later give them still another hoeing, and, if necessary, another weeding. When tops die and fall, the crop should be pulled, throwing about four rows together to dry. In about a week, turn or stir them, and when the tops have become perfectly dry, cut them off one inch from the bulb. In a few days more they are ready for storing. White varieties are apt to discolor and should be taken in as soon as pulled. Store in some cool, well-ventilated place—cellars are usually too warm and damp—some outbuilding or up-stairs

room is much preferable. They will stand a great amount of cold weather without injury. Never handle when frozen, but endeavor to keep them about the freezing point without freezing.

**The New Way**—Consists in transplanting onions instead of sowing the seed where it is to grow. This practice is not common among gardeners, although they are aware that onions may be successfully transplanted, but the many decided advantages to be gained seem to have been overlooked. The many gains are (1) securing a perfect stand of plants, (2) saving of labor at a most critical time, (3) advance in time and maturity, ripening at least four weeks earlier, thus making it possible to use the land for other crops, (4) increasing the crop from 50 to 100 per cent., according to variety, (5) improvement in appearance and market value—their large and uniform size and early ripening bring quick sales at good prices, (6) takes less seed, (7) a surer crop, because they have a longer time to grow before hot, dry weather sets in.

The seed is sown in the green-house, hot-bed or cold frame, about six weeks before the ground outside is expected to be fit for the plants, say February 15th to March 1st, in this latitude, in flat or shallow boxes, or in the soil of the beds, in rows three inches apart. Sow evenly, cover carefully one inch deep, after which firm the soil well with a piece of board. One and a half to two ounces of seed will sow 3 x 6 feet, and give 6,000 to 8,000 plants. As soon as the ground is dry enough to work well outside, it should be prepared in the manner described, and the plants transplanted from two to three inches apart, in rows 12 to 14 inches apart, firming the soil well around the roots, taking care to set plants not too deep, but about the same depth as they were. Cultivate as in the ordinary way, but you will have very little hand weeding to do, and then it will not be ABSOLUTELY NECESSARY to get down on your hands and knees as it was in THE OLD WAY. If onions are wanted for bunching green, they may be set closer than two inches.

This plan may not be advisable for those who grow on a large scale, especially so where soil, climate and seasons are well adapted to the growth of the onion, but it can be readily seen that it has decided advantages for the general market gardener, because he already has the necessary hot-beds, etc., and can use the early bunch onions as well as the early ripe ones, and the ground after the crop is off to good advantage.

The foreign varieties—Mammoth, Pompeii, Prize Taker, Giant Rocca, Mammoth Silver King, etc., give a larger gain in size than the ordinary sorts—Danvers, Wethersfield, etc., grown by this method. Our Prize Taker (American) gave excellent results in size and quality the past season. But it should be remembered that the foreign sorts are not as good keepers over winter, and should be sold early. Handsome onions can easily be grown to measure 3 to 4 inches in diameter, and

they sell readily at fancy prices; and for bunching onions, the early foreign varieties, like White Barletta and Silverskin, may be had nearly as soon as from sets or button onions from which bunching onions are usually grown. By this method these two varieties ripen up very early, and grow double the size they do in the ordinary way, and sell at good prices long before any other onion is in the market.

**Beware of Cheap Seed**—It costs but one or two dollars more per acre to use the very best seed: With the one you are **SURE OF GOOD RESULTS**, with the other you are just as sure of partial, if not **ENTIRE failure**. For descriptions of various reliable varieties see our **Seed Annual**.



PICKLING ONION.

### ONION SETS.

Sets furnish large onions early, as well as the first green onions for table use. Plant the sets as early in Spring as possible, in shallow drills, one foot apart and four inches between sets. Cover slightly. They can be used in a green state in June, and are ripened off by July or August. To grow sets, sow the seed early in Spring very thickly in beds or drills. When the tops are down, gather the little bulbs, dry and store. Shallots, Potato Onions and White Multipliers are grown only from bulbs, and should be planted in April, May or June. Select large bulbs and set them six inches apart, their crowns just below the surface.

### PARSLEY.

Parsley is used for seasoning soups, meats, etc., for salads and garnishing, and as an ornamental border in the flower garden. It thrives best in rich, mellow soil. Since the seed germinates very slowly, the plants sometimes not appearing for three or four weeks, sow as early as possible, and soak the seed a few hours in luke-warm water before sowing. Sow thickly in rows one foot apart; and cover one half inch deep. Thin

out to six inches apart in the rows, or, better still, transplant and cut back. The finest and most perfect leaves come from frequent transplanting and cutting back. One ounce of seed sows about 140 feet of drill.



PARSNIP.

### PARSNIP.

The Parsnip has value not alone as a table vegetable, but it is also one of the best roots for stock feeding. Its long, slender roots call for a deep, mellow, rich soil. A shallow bed or dressing of fresh manure will make short forked roots of inferior quality. Sow early in spring in drills fifteen inches apart and one-half inch deep. When the plants are two or three inches high thin out to six inches in the rows. Cultivate often until the leaves cover the ground. These roots are improved by frost, and the bulk of the crop should be left in the ground over winter. Such as are wanted for immediate use store in a dry cellar with a covering of sand. One ounce of seed contains about 6,000 seeds and will sow 150 feet of drill.

### PEAS.

Peas succeed best in light, dry, loamy soil. Early and dwarf sorts require richer soil than the late varieties. If manure is used let it be old and well rotted, or there will be a rank growth of vines with few pods. Sow the early, smooth, round sorts as early in spring as the ground can be worked. Seeds of wrinkled varieties are more liable to rot if ground is cold, and should be planted later. Sow all the varieties quite early and depend for succession upon the different times



PEAS.



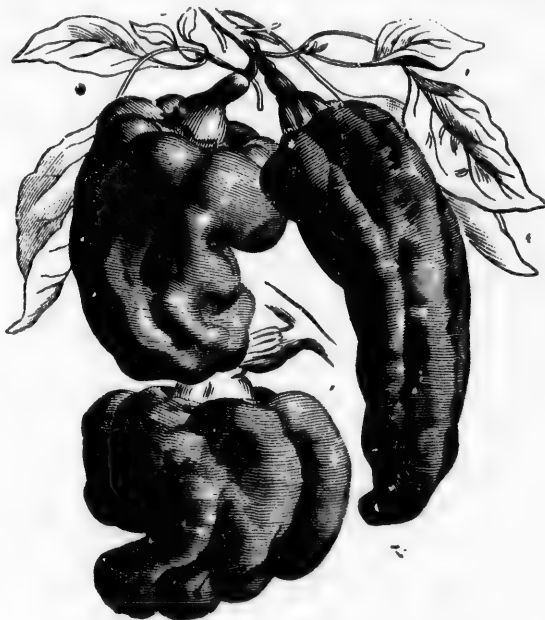
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of ripening of the various sorts, or from the first sowing, sow every two weeks until June for a succession. After that there is danger of mildew. Discontinue then until August, when a planting of an extra early or early sort will often produce a good crop. Sow the seed in single drills, three feet apart for dwarf sorts, and four for late sorts, or in double drills six or eight inches apart, one inch apart in the drill, and not less than four inches deep, or for late sorts seven or eight inches deep, since deep planting prevents mildew and prolongs the season. Cultivate well and draw the earth twice to the vines during growth. Stake the tall varieties when they begin to vine. Pick the pods as soon as fit, and allow none to ripen on the vines, as they then will cease bearing. One quart of the small seeded sorts will sow 175 feet of drill. One quart of the large seeded sorts will sow 120 feet of drill. Support must be furnished for tall growing varieties, but when grown as a market crop peas are never staked.

### PEPPER.

Peppers are highly valued for their pungent flavor, and are used in flavoring soups, meats, etc.; also used for pickles and man-goes. Sow in a hot-bed in April and transplant to open ground in warm settled weather, to rows two feet apart and 18 inches in the rows. Or, when all danger of frost is passed, sow at once in open ground, and thin to same distance as above. Any rich fertilizer or bird manure, if applied and stirred



PEPPERS.

into the soil when the plants are six inches high, will be of great benefit. Hoe frequently. One ounce will produce 2,000 plants.

## POTATOES.

*In drills 3 feet apart; 12 to 14 bushels to the acre. 1 peck will plant about 125 hills.*

The potato, like all robust-growing vegetables, can be grown with varying success on soils of all kinds, and in all conditions of fertility, but the soil best suited to it is a sandy loam. In all heavy soils it is more subject to disease, and the flavor also is much inferior. In breaking up good pasture land the decaying sod answers sufficiently well for the first year in lieu of manure. Manure is applied either in rows or hills, or broadcast over the hills and plowed in—the latter in most cases being preferable. If the soil is good, but little manure is required. In highly enriched soil the plants are more liable to disease than when grown in soil that is naturally good. The best fertilizers are those of a dry or absorbent nature, as plaster, lime, superphosphate of lime and bone dust. For wet soils these are particularly beneficial, as they not only promote growth but prevent disease. Plant as early in spring as the ground can be had in fair working order, in hills or ridges about three feet apart, covering in light warm soils about four inches deep, but in cold, wet situations two and one-half or three inches will be sufficient.

## POTATO CULTURE.

By Elbert S. Carman, editor of *The Rural New Yorker*, and originator of the foremost of potatoes—*Rural New Yorker No. 2*. This book gives the result of 15 years experiment work on the Rural grounds. How to increase the crop without corresponding cost of production; Manures and Fertilizers; The Soil, Depth of Planting; Seed; Culture; The Rural Trench System; Varieties, etc. Price, cloth, 75c; paper, 50c.



MAMMOTH CHEESE PUMPKIN.

## PUMPKIN.

Pumpkins are easily grown and are profitable for stock feeding. At time of corn planting scatter a few seeds in every fourth or fifth hill, or for a large crop sow in May, in good warm soil in hills eight to ten feet apart each way, four plants to

a hill. Avoid planting near other vines as they hybridize. One ounce will plant 15 hills ; one pound 200 or 300 hills.



SCARLET WHITE TIP TURNIP  
RADISH.

## RADISH.

Radishes thrive best in a light, rich, mellow soil, and to bring out their mild qualities they must make a quick and tender growth ; heavy or clay soils not only delay their growth, but produce a much inferior crop in appearance and flavor. Sow for very early use in hot-beds during the Winter and early Spring, or later on in sheltered borders, in well-manured, deeply dug, and finely raked soil ; if not well stimulated into a rapid growth, they become fibrous and tough ; sow

in drills 10 inches apart, and thin to 2 inches in the rows. Sow at intervals of two or three weeks until September for a succession. As soon as the first leaves appear, sprinkle with soot, wood-ashes, or air slacked lime, or slug shot, to save them from the little black cabbage and turnip fly. The winter varieties should be sown in July and August ; like the turnip, they make the best growth in autumn, and must be taken up before severe frost, and stored away in a cool cellar in sand, or a pit, where they will keep tender and crisp all winter ; before using put in cold water, which adds to their freshness.



SCARLET OLIVE RADISH.

## RHUBARB (PIE PLANT).

Sow in April in drills one inch deep and one foot apart ; when plants are three to four inches high, thin out to 10 inches apart and cultivate well during the season ; in the fall or following spring transplant into hills about three feet apart each way. The soil must be very deep and heavily manured. Give a top dressing of manure every fall. One ounce of seed produces about 1,000 plants.

### SALSIFY (Vegetable Oyster).



Sow early in spring in drills 15 inches apart and one to two inches deep; thin to six inches apart. Soil should be very deep and mellow, in order that the long root may grow straight down. Store same as carrots for winter use, or they can be left in the ground until spring. One ounce of seed will sow about 50 feet of drill.

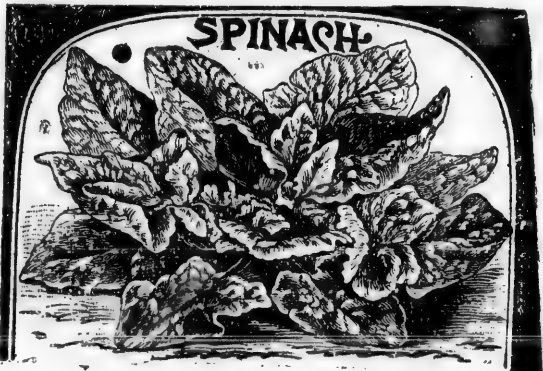
### SCORZONERA, or BLACK SALSIFY.

Treatment same as for Salsify, which it closely resembles, except that the skin is black. Soak in cold water a few hours before cooking, to remove the bitter taste. One ounce of seed will sow 75 feet of drill.

### SEA KALE.

Sea Kale is only used after blanching. The midrib is the part used. Plants started in the hot-bed in the spring are fit for blanching one year earlier than seed sown in the open ground. If in the open air, sow the seed three feet apart in the row.

Select very rich, well-drained soil, spade deeply and sow in drills one foot apart and one inch deep. For spring and summer use, make the first sowing early in March, and continue at intervals of two or three weeks until the middle of July. Sow in August or September for winter



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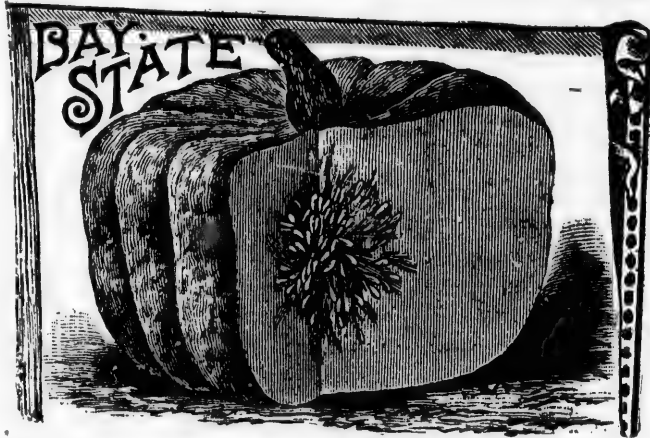
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or early spring use, and protect with a covering of straw during severe weather. One ounce will sow 100 feet of drill. Ten to twelve pounds are required for an acre.

### SQUASH.

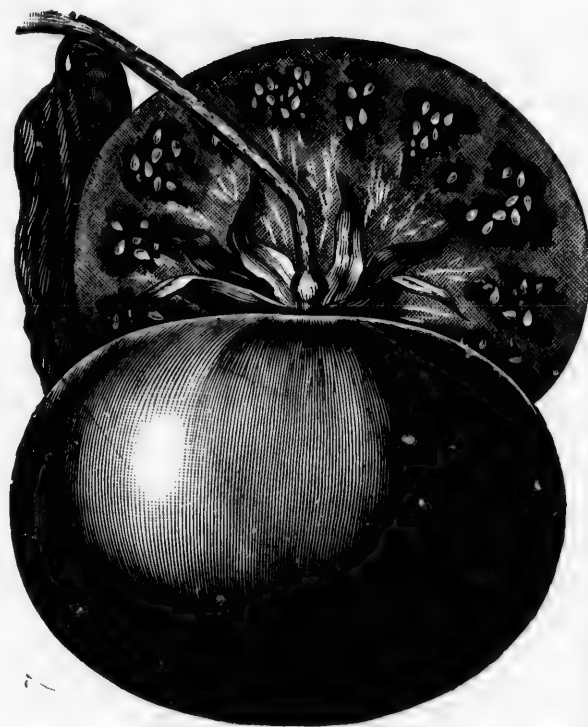
A class of vegetables embracing more marked distinctions in sorts, fitted for more varied uses, and to be found during the extremes of the season in a better state of perfection than, perhaps, any other product of our gardens. Being of tropical origin, their growth is all consummated during summer; yet the fruit of the "winter varieties" may be kept, with a little care, until May. They are all of luxuriant and vigorous growth, and although they will grow readily on almost any soil, yet there is hardly anything cultivated that will so well repay generous treatment. Like all plants of this class, it is useless to sow until the weather has be-



come settled and warm. Light soils are best suited to their growth, and it is most economical of manure to prepare hills for the seeds in the ordinary manner, by incorporating two or three shovelful of well-rotted manure with the soil for each hill. For the bush varieties, the hills should be from three to four feet each way and for the running sorts from six to eight feet. Eight or ten seeds should be sown in each hill, thinning out after they have attained their rough leaves, leaving three or four of the strongest plants. Three ounces will sow 100 yards. Four to five pounds are required per acre.

### TOMATO.

For early plants sow in hot-beds early in March, in drills five inches apart and  $\frac{1}{2}$  inch deep; when the plants are about two inches high, transplant into another hot-bed four inches apart, each way: plant out in the open



ground early in May, or as soon as danger from frost is over, four feet apart each way in hills, which should have a shovelful of well-rotted manure mixed with the soil. Water freely at time of transplanting; when the first fruit is set, pinch off the ends of the branches to obtain early fruit. Sufficient plants for a small garden can be grown in a shallow box or a large flower-pot, by placing it in a sunny window in a warm room or kitchen. For late use, sow in a sheltered border in May, and set out the plants in July; the green fruit can be picked off before frost and be ripened under glass. By

training the Tomato vines on trellises or tying to stakes, they will increase in productiveness; the fruit will ripen better and be of finer quality.

### TURNIP.

For early use sow the small sorts as soon as the ground can be worked in the spring in drills 14 inches apart; the field varieties 30 inches. As the seed is very fine, it should be covered but slightly, excepting in very dry weather. Of the early varieties thin the plants to six inches and the Swedes to one foot. For fall and winter use, the early kinds should be sown from the middle of July to the middle of August, and the Swedes from the middle of June to the middle of July.

### AROMATIC HERBS.

Aromatic or Sweet Herbs are worthy of more attention than they generally receive. If cooks used them more freely, doctors would have less occasion for prescribing them. The soil of the herb bed should be mellow and warm, but not over-rich. Deep, fertile soil produces an increase in size and foliage at the expense of fragrance, strength, and flavor. The seeds should be sown as early in spring as the ground can be prepared.



## ON THE CULTURE OF FLOWERS FROM SEEDS.

**S**o much depends on careful sowing and planting in the cultivation of flowers that we do not think it amiss to add a few suggestions on this important subject, in the hope that they may smooth some difficulties out of the way of the novice in floriculture.

First, the **Soil** in which the seed is sown, should be rich and nourishing, but not too heavy, a light, rich loam, well mixed with sand and leaf-mold, and, better still with some powdered charcoal is preferable; press the soil down rather firmly, so that it will not sink when watered and disturb the young plants. Scatter the seeds on the surface, cover with sifted earth, and do not allow it to dry. **An absolute essential of successful flower growing** is not to bury the seed

too deep. The very best of seed cannot grow when choked with soil. Amateurs fail here oftener than at any other point, and their seeds and seedsmen are unjustly blamed for the failure. The depth of planting depends on the size of seed. Large seed, such as Sweet Peas and Morning Glory may be covered from  $\frac{3}{4}$  to  $1\frac{1}{2}$  inches; such as Zinnia, Mignonette and Candytuft, from  $\frac{1}{4}$  to  $\frac{1}{2}$  inch. In the case of very small seeds, such as Petunia, Lobelia, etc., the covering of soil should be very thin, barely hiding the seeds and



MIGNONETTE PLANT.

pressing down with a small board or the palm of the hand, and as seeds so small are liable to be carried down into the soil unless very carefully watreed, it is even advisable to moisten the surface of the soil before

sowing instead of afterward. Flat seeds, such as Zinnia and Cobæe are best put in edgewise, being sometimes liable to rot when sown flat. Sun and light must be excluded from the newly sown seed—cover with paper, or a piece of moist flannel, held down by sticks or stones until the seed has germinated, and then admit gradually the air and light.

As the plants grow strong, the tall sorts should be provided with neat stakes, and the climbers supplied with trellises or other support. After this, the main requisites of the plants are **plenty of water** during dry weather and **entire freedom from weeds**. By following the special instructions for the several classes, one can hardly fail of success. We have placed all the varieties under one of the following heads : **Annuals**, plants which flower and produce their seed within the year in which they are sown ; **Biennials**, plants which bloom and produce their seed the second year ; and **Perennials**, which live and bloom for a series of years. In the lists of varieties under these headings, we designate the hardy sorts by the letter H. ; half-hardy sorts by H. H. ; tender sorts by T.

## ANNUALS.

Annuals are usually sown in one of the three following methods : 1st, in Spring, in hot-beds, or in pots, set in the hot-beds ; 2nd, in Spring, in the open ground, either in special seed beds or in their permanent places ; 3rd, in autumn.

1. For most annuals, the end of March or early April is sufficiently early to sow in hot-beds. Prepare the bed early in March, and when ready for sowing, press the soil down rather firmly, form a nice even surface, water if dry and sow the seed on the top and cover lightly with fine sifted earth ; very fine seeds do not need covering, only pressing well into the earth,



CALENDULA PLANT.

with a small flat board or with the hand. One often saves considerable trouble by labelling each variety as sown. Cover the frames with matting at night and uncover on cloudy days, so that the young plants become gradually accustomed to the light. Raise the sash to give air as often as safe, after the seeds have started to grow, add shade from the sun with some light covering. As soon as the plants have several leaves, they must be either thinned out, throwing away the superfluous ones, or transplanting them to another part of the hot-bed, where they are allowed to grow; keep the bed closed and shaded for two or three days, after which give plenty of air until strong enough to be again transplanted in the open ground.

2. For seed beds, choose a sheltered situation, sloping to the south, if possible; make the soil fine and smooth and cover with leaf-mould or other light soil. Plant as directed for hot-beds and cover with finely sifted earth, pressing down firmly. As beds in the open air dry out quickly, it is well to cover all with a thin layer of finely cut moss or long straw. The finer seeds may be sown in small circles, which can be covered at night until germination with an inverted pot. Open air sowings may be made from April to June, according to the weather.

The hardier annuals, and such as do not bear transplanting well, or those which are needed in large numbers, are usually sown where they are to remain, and the process is virtually the same as above. Some few plants, such as Poppies, Larkspurs, Bachelor's Buttons and Candytuft, may be sown in permanent places as early as the weather permits, and make much finer plants for their long season.

3. **Autumn Sowing.**—Most annuals ripen their seed toward the end of summer, and the seeds either lie dormant in the ground until spring or start in the fall, and remain inactive during the cold weather. As this is the course of nature, it is not to be wondered at that with Pansies, Larkspurs, Forget-me-nots, Collinsia, Gilia, Silene, Candytuft, and other hardy plants, autumn sowings produce finer colors and larger flowers the following season. Do not sow too early; nearly all sorts will need considerable protection in our climate—coarse litter and over all a bit of straw matting, by preference. Tenderer sorts should be transplanted into a cold frame and protected.

For the half-hardy and tender annuals, we recommend culture No. 1, or, if sown late enough, No. 2; most of the hardy sorts may be grown by any of these methods.

The average cultivator can scarcely fail to be successful in growing any of the flowers hereafter listed if the general directions above given are carried out and some attention bestowed on the more detailed cultural instructions which are printed on every packet of seeds sent out by us. The best of seed if improperly sown will fail to grow, and again we remark: *do not bury the seeds too deep.*

# LIST OF ANNUALS.

Abroria, H.	Collinsia, H.	Mignonette, H.
Ageratum, H.	Convolvulus (Morning Glory), H.	Nasturtium (Tropaeolum), H.
Alonsoa, H.	Cornflower (Centaurea Cyanus), H.	Nemophila, H.
Alyssum, H.	Cuphea (Cigar plant), H. h.	Nicotiana, H.
Amaranthus, H.	Cyclanthera, H. h.	Nigella, H.
Ammobium, H.	Cypress Vine, H.	Nolana, H.
Anagallis, H. h.	Datura, H.	Perilla, H. h.
Antirrhinum, H.	Dianthus, H.	Petunia, H. h.
Asperula, H.	Escholtzia, H.	Phlox, H. h.
Asters, H.	Four o'Clock (Mirabilis), H. (Marvel of Peru.)	Poppy, H.
Balloon Vine, H.	Gaillardia, H.	Portulacca, H.
Balsam, H.	Gilia, H.	Rhodanthe, H.
Bartonia, H.	Godetia, H.	Salpiglossis, H. h.
Bachelor's Button, H.	Gomphrena, H.	Salvia, H.
Begonia, T.	Gourds, H.	Sanvitalia, H.
Brachycome, H. h.	Helichrysum, H.	Saponaria, H.
Browallia, H. h.	Ice Plant, H. h.	Scabiosa, H.
Cacalia, H. h.	Jacobaea, H.	Schizanthus, H.
Calendrinia, H.	Linaria, H.	Sedum, H.
Calendula, H.	Linum, H.	Sensitive Plant, H.
Calliposis, H.	Lophospermum, H. h.	Solanum, H.
Callirhoe, H.	Lupinus, H.	Stocks, H. h.
Canary Bird Flower, H. h.	Malva, H.	Sunflower (Helianthus), H.
Candytuft, H.	Marigold (Tagetes), H.	Sweet Peas, H.
Castor Oil Beans (Ricinus), H. h.	Momordica (Balsam Apple), H. h.	Sweet Sultan, H.
Catchfly (Silene), H.		Virginia Stocks, H.
Chrysanthemum, H. h.		Xeranthemum, H. h.
Cockscomb, H. h.		Zinnia, H.



PANSY PLANT.



SWEET PEA.

## BIENNIALS and PERENNIALS.

Most hardy plants of this class should be sown in May or June, in good soil in a sheltered, semi-shaded situation, in the open air, and given good culture throughout the summer. As winter approaches, care must be taken to give them sufficient protection, as they will be found somewhat less hardy than young, fall-sown annuals. If potted and wintered in the cold frame or cellar and planted out in April or May following they give the best results.

LIST OF BIENNIALS AND PERENNIALS.

Abobra, H. h. P.	Digitalis (Foxglove), H. P.	Mimulus, H. h. P.
Abutilon, T. P.	Dolichos, H. P.	Moonflower (Ipomea), H. h. P.
Acanthus, H. P.	Euphorbia, H. h. P.	Musa, H. h. P.
Aconitum, H. P.	Feverfew, H. P.	Oxalis, H. h. P.
Ampelopsis, H. P.	Forget-me-not (Myoso- tis), H. P.	Pansy, H. P.
Anemone, H. P.	Freesia, H. h. P.	Pentstemon, H. h. P.
Aquilegia, (Columbine), H. P.	Fuchsia, H. h. P.	Platycodon, H. P.
Aristolochia (Dutch- man's Pipe), H. h. P.	Gentiana, H. P.	Polyanthus, H. P.
Auricula, H. P.	Geranium, H. h. P.	Poppies, H. B.
Ecconia, H. P.	Glaucium, H. P.	Potentilla, H. P.
Campanula, H. P.	Heliotrope, H. h. P.	Primrose, H. h. P.
Canna, H. h. P.	Hesperis (Sweet Rocket), H. P.	Pyrethrum, H. P.
Carnation, H. h. P.	Hollyhock, H. P.	Rose, H. P.
Centaurea, H. h. P.	Honesty (Lunaria) H. B.	Rudbeckia, H. P.
Centrosema, H. P.	Hop, Japanese, H. P.	Salvia, H. h. P.
Clianthus, H. h. P.	Lantana, H. h. P.	Stevia, H. h. P.
Cobaea, H. h. P.	Lemon Verbena, H. h. P.	Sweet William, H. P.
Coral Tree (Erythrina), H. h. P.	Lavatera, H. h. P.	Thunbergia, H. h. B.
Cowslip, H. P.	Linaria Cymb, H. P.	Verbena, H. h. P.
Dahlia, H. h. P.	Lobelia, H. h. P.	Vinca, H. h. P.
Daisy (Bellis), H. P.	Matricaria, H. h. P.	Viola, H. P.
Delphinium (Larkspur), H. P.	Maurandia, H. h. P.	Wallflower, H. h. P.
	Mexican Primrose, (Enothera), H. h. P.	

SEEDS OF GREEN-HOUSE PLANTS.

These can be sown at any season of the year, but extra care should be given them, especially to such varieties as Begonias, Calceolarias, etc. as the seeds are very small and delicate. Sow the seeds in well-drained pans, choosing for soil a fine sandy leaf-mould, press it firmly, smooth the surface and sow the seed very evenly; cover with a light sprinkling of sand or not at all, lay a pane of glass over the pan, place it in a close frame and keep shaded. Most failures are due to mistakes in watering, which should be done very carefully, the seed pans should never be allowed to dry out, as one neglect will kill the seeds just starting, while on the other hand a slight excess of water will cause the seeds to rot. After the plants are up, remove the glass and prick into other pans with the same soil; great care should be taken not to pull the plants nor tear the roots in transplanting; lift with a trowel or stick and shift with good roots. Keep them shaded after transplanting until the young plants are well established in the new soil. As soon as the plants touch each other, transplant again into small pots with similar soil, using the same precaution of shading at first. If troubled with green flies, fumigate occasionally with tobacco. Besides the above, most sorts have special likings in the way of soil, watering, etc., which must be consulted in growing them. Some of the most popular plants under this head are:

Begonias,	Cyclamen,	Primulas,
Calceolarias,	Gloxinias,	Smilax,
Cinerarias,	Impatiens Sultani,	Torenia



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THIS PLANT FOOD HAS BEEN SOLD BY US TO HUNDREDS OF LOVERS OF FLOWERS IN CANADA, especially during the winter and spring months, never failing to give entire satisfaction to the purchaser, and has produced great gratification by the surprisingly pleasing results in consequence of its having been applied according to directions which accompany each package sent out. PRICE—No. 1, REGULAR SIZED PACKAGE, sufficient for 20 plants for one year, 35 cents. No. 2 PACKAGE, sufficient for 20 plants for three months, 25 cents. Postage paid on receipt of price. Price in bulk, 4 lbs., 60c.; by mail (post paid), 80c.; 5 lbs., 75c.; by mail (post paid), 95c.; 10 lbs., \$1.25 per express.

**TROWELS: STEEL, GARDEN**—Absolutely the best Trowel in the world, Simmers' Steel Trowel. They have given general satisfaction all over. Each, 35c.

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Kills All Kinds of Insect Life.



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